

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria. Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,526	07/07/2003	Arun M. Hamasagar	02-599	6107
719 7	590 08/29/2006		EXAMINER	
CATERPILLAR INC. 100 N.E. ADAMS STREET			AURORA, REENA	
PATENT DEP			ART UNIT	PAPER NUMBER
PEORIA, IL 616296490			2862	
			DATE MAILED: 08/29/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	10/614,526	HAMASAGAR ET AL.				
	Examiner	Art Unit				
The MAILING DATE of this communication app	Reena Aurora	orrespondence address				
Period for Reply	rears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailling date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 15 Ju	Responsive to communication(s) filed on <u>15 June 2006</u> .					
2a) ☐ This action is FINAL . 2b) ☒ This	☐ This action is FINAL. 2b)☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1, 3 - 5, 7, 18 - 24 is/are pending in th)☑ Claim(s) <u>1, 3 - 5, 7, 18 - 24</u> is/are pending in the application.					
4a) Of the above claim(s) 18 - 23 is/are withdra	4a) Of the above claim(s) <u>18 - 23</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1, 3 - 5, 7 and 24</u> is/are rejected.						
•	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Professors Professors Review (PTO 048)	4) ☐ Interview Summary Paper No(s)/Mail Da					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 		atent Application (PTO-152)				

Application/Control Number: 10/614,526

Art Unit: 2862

DETAILED ACTION

This communication is in response to amendment received on 06/15/06.

Claims 1, 3 - 5, 7 and 24 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 - 5, 7 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Munch et al. (5,210,490).

As to claim 1, Munch et al. (hereinafter Munch) discloses a position sensing device comprising a modular housing member having a sensor module disposed therein; a first sensor housing member (12, fig. 2) connected to the modular housing member (20) and adapted for external connection to one of the first (13) and second link members of the linkage system the first sensor housing member (12) having a first sensor conduit therein (32); a second sensor housing member (15) slidably received within the first sensor housing member (12) and having a second sensor conduit (43) therein, the second sensor housing member (15) being connected to the other one of the first and second (16) link members; a first sensor portion (winding) connected with the sensor module and the first sensor housing member (12) and guidably disposed in the second sensor conduit (43); and a second sensor portion (tubular conductor)

Application/Control Number: 10/614,526

Art Unit: 2862

connected with the second sensor housing member (15) and guidably disposed in the first sensor conduit (32); wherein: the first sensor housing member (12) is configured and arranged to at least partially enclose the first sensor portion and the second sensor portion; and the position sensor assembly is operable to register a position of the first link member (13) relative to the second link member (16) as a result of the interaction between the first and second sensor portions (winding and tubular conductor).

As to claim 3, Munch discloses that the first (12) and second (15) sensor housing members comprise first and second tubes, respectively, the second tube (15) being telescopically received within the first tube (12).

As to claim 4, Munch discloses that the first (12) and second (15) tubes have generally circular cross-sectional shapes.

As to claim 5 and 7, 5 Munch discloses that the first sensor portion (32) is disposed generally parallel to or coaxially with the second sensor conduit (43).

As to claim 24, Munch discloses a position sensing device comprising adapting the first linkage member (13) with a first sensor portion (32) at least partially enclosed by a first sensor housing member (12), wherein the first sensor portion (32) and the first sensor housing member (12) are externally disposed relative to the first (13) and second (16) linkage members; adapting the second linkage member (16) with a second sensor portion (43) that is connected to a second sensor housing member (15) and that is at least partially enclosed by and guidably received in the first sensor housing member (12), and the first sensor portion (32) is at least partially enclosed by and guidably received in the second sensor

Application/Control Number: 10/614,526 Page 4

Art Unit: 2862

portion (43) and the second sensor housing member (15) are externally disposed relative to the first (13) and second (16) linkage members; and moving the first linkage member (13) relative to the second linkage member (16) causes the position sensor assembly to register a position of the first linkage member relative to the second linkage member as a result of interaction between the first (32) and second (43) sensor portions.

Response to Arguments

Applicant's arguments with respect to claims 1, 3 - 5, 7 and 24 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/614,526

Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Page 5

Reena Aurora